

WE CLAIM:

1. A dispenser for material comprising:
a collapsible container elongate about an axis from a first end to a second end,
the container closed but for an outlet open at one of the first end and the second end,
a housing to receive the container with the first end of the container coupled to the housing substantially against rotation about the axis relative to the housing,
the second end of the container coupled in the housing journalled for rotation about the axis in a first direction and against rotation in an opposite direction to the first direction,
an activation mechanism for rotating the second end of the container in the one direction, whereby rotating the second end of the container about the axis twist the container about the axis compressing material therein and extruding the material from the outlet.
2. A dispenser as claimed in claim 1 wherein the container comprises a tube elongate about the axis.
3. A dispenser as claimed in claim 1 wherein the container comprises a tube selected from a tube which is circular in cross-section about the axis, a tube which is cylindrical about the axis, and a tube which is frustoconical about the axis.
4. A dispenser as claimed in claim 3 wherein the container carries a cap secured to the tube at the second end for rotation therewith about the axis in the one direction,
the cap carrying bearing surfaces to engage bearing surfaces of the housing and journal the cap to the housing for rotation about the axis,
the cap having an inlet opening securely receiving the second end of the tube and in communication with the outlet of the container,

the cap having an outlet nozzle out of which material is to be dispensed,
the inlet opening of the cap in communication with the outlet nozzle.

5. A dispenser as claimed in claim 4 including a ratchet mechanism which provides for rotation of the container in the first direction and prevents rotation of the container in the opposite direction.
6. A dispenser as claimed in claim 5 wherein the cap carries an activation flange which extends radially outwardly from the cap about the axis so as to present an activation surface which is generally cylindrically about the axis and adapted for engagement to rotate the container in the first direction.
7. A dispenser as claimed in claim 1 including a retainer mechanism carried in the housing to secure the first end of the container to the housing against rotation of the first end of the container relative to the second end of the container.
8. A dispenser as claimed in claim 7 wherein the cap and the retainer mechanism are mounted in the housing such that the axial distance therebetween may vary to accommodate changes in the length of the container with rotation of the second end of the container in the first direction.
9. A dispenser as claimed in claim 8 wherein the cap carries a radially outwardly extending substantially cylindrical flange carrying gear teeth thereon for engagement by an activation mechanism to rotate the cap.
10. A dispenser as claimed in claim 9 wherein the activation mechanism is selected from a manually operated lever connected via a ratchet mechanism to a drive gear engaging the gear teeth on the cap and a motor operatively coupled to a drive gear engaging the gear teeth on the cap.

11. A dispenser as claimed in claim 1 including two said containers independently mounted for rotation about their respective axes with the activation mechanism selected from one which provides independent rotation of each container and simultaneous rotation of both containers.

12. A dispenser as claimed in claim 1 wherein the container comprises an outer cylindrical tubular member and an inner cylindrical tubular member,
the inner tubular member being coaxially received within the outer tubular member,
each of the first and second tubular members being closed at the first end and open at the second end to the outlet,
a first material containment compartment being formed internally within the inner tubular member,
a second material compartment being formed within an annular space in between the inner tubular member and the outer tubular member,
wherein rotation of the second end of the tube relative to the first end extrudes both the first material and the second material from the outlet of the tube simultaneously.

13. A dispenser as claimed in claim 4 including a one-way valve in the outlet nozzle of the cap permitting flow of material outwardly from the cap.

14. A dispenser as claimed in claim 1 including an elongate member disposed centrally within the container along the axis.

15. A dispenser as claimed in claim 14 wherein on rotating the second end of the container about the axis, the container twists about the axis and collapses on the elongate member internally within the container.

16. A dispenser as claimed in claim 15 wherein the container is secured about the elongate member at the one of the first end and the second end of the container remote from the outlet.

17. A dispenser as claimed in claim 15 wherein the elongate member has a central passageway therethrough and openings radially into the central passageway along the length of the elongate member.

18. A dispenser as claimed in claim 17 wherein the elongate member is a coil spring.

19. A dispenser as claimed in claim 15 wherein the elongate member has the container received thereabout at one of the first end and the second end of the container the elongate member extends from the one of the first end and second end internally of the container to a free end, a spring coupled between the free end and the one of the first end and second end of the container remote from the outlet so as to bias the first end and second end of the container axially apart.

20. A dispenser as claimed in claim 15 wherein an external portion the elongate member extends out of the container from where the container is secured about the elongate member, the elongate member secured to the container against relative rotation about the axis, the external portion of the container either engaged by the housing to secure the first end of the container to the housing against rotation or engaged by the actuation mechanism for rotation of the second end of the container about the axis.

21. A dispenser as claimed in claim 20 wherein the container is secured about the elongate member at the one of the first end and the second end of the container remote from the outlet.

22. A dispenser as claimed in claim 20 wherein the elongate member has a central passageway therethrough and openings radially into the central passageway along the length of the elongate member.